REMARKS

Claims 1-16 and 18-21 are pending. Claim 10 has been amended to correct a typographical error and to put the claims in condition for appeal. The word "layer" was inadvertently deleted when claim 10 was amended in the last response to the previous non-final Office Action. Claim 17 was previously canceled, without prejudice or disclaimer. Claim 20 was previously withdrawn from consideration. Reconsideration of the application in light of the following remarks is requested.

§ 103 Rejections

Claims 1-10, 12-16 and 19 were rejected again under 35 USC § 103(a) as being unpatentable over Langer et al. (US Patent No. 6,458,418 B2); and Claims 11, 18 and 21 were rejected under 35 USC § 103(a) as being unpatentable over Langer et al. (US Patent No. 6,458,418 B2) in view of Papadopulos (US Patent No. 4,362,016).. In support of these rejections, the Office Action indicates that it would have been obvious to the person of ordinary skill in the art to make a multilayer mat with a non-intumescent layer positioned between two intumescent layers. In support of this position, the Office Action references column 15, lines 60-64 of Langer et al., which states:

> The present invention also contemplates intumescent sheets having three or more layers wherein at least one layer comprises an intumescent material and wherein adjacent layers are desirably comprised of different compositions.

It is further argued in the Office Action that:

> ... if there are three layers to be used as mounting mat and in these three layers, two are intumescent layers and one is non-intumescent layer, there are only two ways to construct a mounting mat.. First is two intumescent layers next to each other and second is two intumescent layers between the non-intumescent layer. Thus, it would have been obvious to try and expect to get a desired result.

Applicant's Response

From the above statements, it appears that the Office Action is arguing that it would been obvious, based on the above cited generic teaching in Langer et al., for the person of ordinary skill in the art to try to make a multilayer mat with a non-intumescent layer positioned between two intumescent layers. MPEP § 2143 describes the prerequisites for proving a prima facie case

of obviousness based upon an "Obvious To Try" rational. In particular MPEP §2143E states, in pertinent part:

> To reject a claim based on this rationale, ... Office personnel must articulate the following:
> (1) a finding that at the time of the invention, there had been a recognized problem or need in the art, which may include a design need or market pressure to solve a problem;
> (2) a finding that there had been a finite number of identified, predictable potential solutions to the recognized need or problem;
> (3) a finding that one of ordinary skill in the art could have pursued the known potential solutions with a reasonable expectation of success; and
> (4) whatever additional findings based on the *Graham* factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness.
>
> ... If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art. (Emphasis Added).

The Office Action fails to identify any "recognized problem or need in the art" that would have motivated the person of ordinary skill in that art to make a multilayer mat as recited in the present claims. As a result, the Office Action has failed to make all of the above required findings and, therefore, an "Obvious To Try" rationale cannot be used to support the obviousness rejection of claims 1-16, 18, 19 and 21.

The Langer et al. invention is directed to making mats having multiple layers bonded together without having to use auxiliary bonding means (e.g., resins, adhesives, adhesive tapes, stitches, staples, and other externally used bonding means) to keep the layers together. By avoiding such auxiliary bonding means the various problems associated with their use can be avoided. Langer et al. provides no disclose, teaching or suggestion to produce a mat, as presently claimed, with a non-intumescent layer positioned between two intumescent layers, and Langer et al. does not identify any problem or need in the art that would be solved by such a mat construction. Langer et al. does not even disclose or teach the use of two intumescent layers with one non-intumescent layer. The only source disclosing a multilayer mat having a non-intumescent layer positioned between two intumescent layers is the present application. In addition, the only source identifying a need for such a mat construction is the present application.

The only teaching or suggestion provided by Langer et al. about the position of a non-intumescent layer relative to an intumescent layer indicate a multilayer mat having a non-intumescent layer as its inner layer and an intumescent layer as its outer layer. In the context of the Langer et al. disclosure, references to an inner layer are directed to a layer located against the pollution control element and references to an outer layer are directed to a layer located against the outer housing. In particular, as noted in the Office Action, Langer et al. teaches to position an intumescent layer on the outside of the mat, against the metal housing. For example, see column 8, lines 33-36 where it states:

> A well-timed and significant intumescent expansion is achieved by non-homogeneously positioning the intumescent particles in the outer layer or toward the outside of the mat. (emphasis added)

See also column 29, lines 2-5 and column 30, line 17. In addition, column 11, lines 63-65 of Langer et al. states that:

> the layer having the greatest thickness when dry (such as the inner non-intumescent layer) is desirably the layer that is formed first. (emphasis added)

The layer formed first, in the Langer et al. process, would not be a layer positioned between two other layers. If the Langer et al. process was used to make the present claimed inventive mat, an intumescent layer would be formed first, followed by a non-intumescent layer, and then another intumescent layer.

Thus, the only relationship between a non-intumescent layer and an intumescent layer expressly disclosed and taught by Langer et al. is one where a non-intumescent layer forms one side of the mat and an intumescent layer forms the other side of the mat. In addition, Langer et al. identifies no problem or need in the art that would have motivated the person of ordinary skill in the art to make a multilayer mat constructed with a non-intumescent layer positioned between two intumescent layers. Therefore, according to MPEP §2143E, the Office Action has failed to meet its burden of proving a prima facie case of obviousness for claims 1-16, 18, 19 and 21. Accordingly, the rejections of claims 1-16, 18, 19 and 21 under 35 USC § 103(a) have been overcome and should be withdrawn.

It is also submitted that there are other limitations recited in the claims, in addition to those discussed above, which further distinguish the claimed invention patentably from the cited art and the other art of record. These additional distinguishing limitations were not discussed because there is no need to do so at this time.

In view of the above, it is submitted that the application is in condition for allowance. Examination and reconsideration of the application is requested.

Respectfully submitted,

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Date

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